### Headquarters U.S. Air Force

Integrity - Service - Excellence

# Domestic Reduced Vertical Separation Minimum (DRVSM) Aircrew Training



Part II: Non-RVSM Aircraft

**Air Force Flight Standards Agency** 

**U.S. AIR FORCE** 



### DRVSM Aircrew Training

#### Part II Contents:

- DRVSM Mandate
- RVSM Authority
- DoD/FAA Memorandum of Understanding
- Flight Plan Equipment Suffixes
- Pilot/Controller Phraseology
- Non-RVSM Aircraft Accommodation Procedures
- Climbs/Descents through DRVSM Airspace
- DRVSM Denial Reports



#### Domestic US RVSM Mandate

- RVSM authority is required for operation in DRVSM Airspace with limited exceptions:
  - Non-RVSM DoD, lifeguard, foreign state (government) and certification/development aircraft can be accommodated by providing 2,000 ft vertical/appropriate horizontal separation
  - Provisions made for non-RVSM compliant aircraft to climb to and descend from flight levels above RVSM airspace
  - ALL non-RVSM aircraft operations are conducted based upon workload and traffic conditions



## **RVSM Authority**

- USAF Major Commands grant RVSM Authority/ Operational Approval to aircraft based on:
  - RVSM Airworthiness Certification from Aircraft Program Office based on equipage/performance
  - Implementation of proper training, logistics, maintenance and operational procedures
  - Aircraft RVSM authority should be documented in Flight Manual (Dash-1), MDS-Specific AFI Vol. 3, or equivalent document
  - For aircraft-specific questions, ask your MAJCOM
- Aircraft which have not been granted MAJCOM authority for RVSM operations will be referred to as "non-RVSM" aircraft



- Memorandum of Understanding signed between FAA and DoD in Dec 01 governs the use of DRVSM Airspace by DoD aircraft
- Policy: FAA will accommodate non-RVSM compliant military aircraft operation within DRVSM airspace, without mission degradation, to the extent practicable based upon existing traffic and safety considerations

Vertical separation standard applied between non-RVSM aircraft and all other aircraft shall be 2,000 feet



# Flight Planning – Equipment Suffixes

- Non-RVSM aircraft <u>must not</u> use RVSM suffix ("/Q" or "/W") even if intending to operate in RVSM airspace
  - Continue to use the appropriate non-RVSM equipment suffix indicating aircraft navigation capability
  - ATC uses equipment suffix information to apply 2,000 vertical separation minimum to non-RVSM aircraft accommodated in RVSM airspace



### Pilot/Controller Phraseology

The pilot of a non-RVSM aircraft will inform the controller of the lack of RVSM compliance using the phraseology "Negative RVSM"

Message	Phraseology
For non-RVSM aircraft, pilot will report lack of RVSM approval:	Pilot: "Negative RVSM (supplementary information)"
a. On the initial call on any frequency in the RVSM airspace and	(e.g., "military")
b. In all requests for flight level changes pertaining to flight levels within the RVSM airspace and	
c. In all read-backs to flight level clearances pertaining to flight levels within the RVSM airspace and	
d. In read back of flight level clearances involving climb and descent through RVSM airspace (FL290-410)	



# Non-RVSM Aircraft Accommodation

- Methods For Non-RVSM Aircraft To Request Access To RVSM Airspace:
  - Letter of Agreement (LOA) / Memorandum of Understanding (MOU)
  - File-and-Fly
    - Includes designated "Priority Flights"
  - NOTE: Effective 12 May 05, pre-coordinated conditional approvals are eliminated

Priority for access to RVSM airspace will be afforded to RVSM compliant aircraft, then File-and-Fly flights



# Non-RVSM Aircraft Accommodation, Cont'd

#### LOA/MOU

■ Local flying wings/units may enter into agreements with ATC facilities for accommodation of regular, routine flights. Operators must comply with provisions in the LOA/MOU.

#### File-and-Fly

- Operators file the requested RVSM altitude on their flight plan to notify ATC of their intention to request access to RVSM airspace
- No additional coordination with the FAA is required before departure
- Once airborne, the pilot will request clearance into RVSM airspace from the appropriate ATC controller



### **Priority Flights**

- Effective 12 May 05, certain high-priority non-RVSM flights may be designated as requiring special consideration for accommodation
  - Only mission-critical flights meeting designated criteria are eligible – see next slide for criteria
  - Flights are either "Priority" or they aren't no need to specify to FAA which criteria they fit into
  - Not intended for routine flights to circumvent the normal DRVSM File-and-Fly process

While special consideration will be afforded to Priority Flights, accommodation of any non-RVSM flight is workload permitting



## Priority Flight Criteria

- The following non-RVSM aircraft flights are eligible to be designated as Priority Flights:
  - Aircraft engaged in active continental defense or homeland defense missions; or
  - Aircraft engaged in operations that will have an immediate effect upon combat operations or readiness of the Armed Forces; or
  - Aircraft engaged in operations in accordance with approved federal and state emergency plans, medical evacuations or search and rescue; or
  - Aircraft engaged in the transport of Combatant, Specified or Unified Commanders, Type/Major Command Commanders and key civilian personnel (i.e. 4-stars and equivalent or higher/code 3 or above)



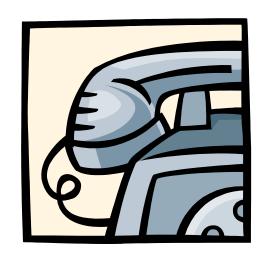
# Priority Flight Procedures

- The FAA is notified of each day's priority flights via the DoD Priority Mission (DPM) website:
  - http://www.fly.faa.gov/rvsm
  - Designated wing/squadron personnel enter required information on eligible flights needing accommodation into the DPM website
  - Flight information may be entered up to one business day prior to the flight
- The following information must be entered:
  - Call sign, point of departure, destination, requested altitude, POC, proposed departure time, and number of aircraft in formation (when applicable)



# Priority Flight Procedures, Cont'd

- Priority Flight information should be entered into the DPM website at least one hour prior to the proposed departure time
  - If information is entered less than one hour prior, the departure facility Traffic Management Unit (TMU) must also be called (phone #s in FLIP AP/1)
  - If the flight doesn't depart within 8 hours of it's proposed time, it must be re-entered into DPM website
  - If the flight is cancelled, it should be cancelled from website also





# Priority Flight Procedures, Cont'd

- Priority Flights will file a flight plan using normal procedures – no special remarks needed
- Once airborne, the pilot will request clearance into RVSM airspace from the appropriate ATC controller
  - ATC will review the DPM website to determine the priority status of the flight
  - No requirement for pilots to inform controllers of their priority status
  - Controllers will pass priority status to next sector/center



# Climbs/Descents through DRVSM Airspace

- Non-RVSM aircraft requesting climb to and descent from flight levels above DRVSM airspace:
  - Can only be considered for accommodation provided:
    - Aircraft is capable of continuous climb/descent through DRVSM airspace and does not need to level off at an intermediate altitude for any operational consideration
    - Aircraft is capable of climb/descent at normal rate for the aircraft
  - Pilots of non-RVSM aircraft climbing/descending through DRVSM airspace must report "Negative RVSM" to controllers



### DRVSM Denial Reports

- DRVSM Denial Report is located in FLIP AP/1 Chapter 3 and on DoD NOTAM website
  - Intended for documentation and reporting of DRVSM airspace denial resulting in adverse mission impact
  - Report is submitted to regional military rep (e.g. AFREP)
  - Instructions are included with form



#### DRVSM Denial Report



The following information will be utilized for Data Analysis.

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Callsign:				Date:						
Unit:				ATD (UTC):						
Number/Type				Departure						
Aircraft:				ARTCC:						
Requested										
Altitude:				Destination:						
Clearance										
Alti	tude:									
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П	File and Fly		Pre-Coordinated		ALTRV			2 or I	Less AF	RTCCs
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	US Army		USN/USMC		USAF			3 or !	More A	RTCCs
			Operatio	nal In	formation	1				
Ope	erational/Trainin	g Obje	ctives Accomplished?		Yes		Degr	raded		No
Mus	st Re-Fly to Med	et Miss	ion Objectives?				Yes	3		No
-	Profile Covered in Letter of Agreement?						Yes			No
Mis	rative:	LOUIS C	T G CONOR.				1100			
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### DRVSM Aircrew Training

- This concludes Part II of DRVSM Aircrew Training
- For more information:
  - FAA DRVSM Website:

http://www.faa.gov/ats/ato/drvsm/Default.asp

HQ AFFSA Website:

https://private.andrews.amc.af.mil/AFFSA/affsa.htm

DINS NOTAMs Website:

https://www.notams.jcs.mil/



